

CLAIMS

We Claim:

1) An improved vehicle suspension system in which a conventional suspension system comprises an upper and a lower suspension arm, an upper and lower ball joint, each comprising a spindle having included tapered openings whereby the improvement comprises the steps of :

Detaching the spindle from the upper and lower ball joint;

Detaching the upper and lower ball joints from the upper and lower suspension arms;

Installing a Heim joint including an annular shaped socket encasing a freely movable ball shaped member having an included opening therein into the location previously occupied by the ball joint attached to the upper and lower suspension arm;

Installing an upper and a lower tapered insert into the included opening of the ball shaped member and securing the upper and lower inserts by fastening means;

Installing the tapered lower insert into the upper and lower included tapered openings of the spindles thereby enhancing the vertical and horizontal travel of the suspension system.

2) An improved vehicle suspension system in which a conventional suspension system comprises an upper and a lower suspension arm, an upper and lower ball joint, each comprising a spindle having included tapered openings whereby the improvement comprises the steps of :

Detaching the spindle from the upper and lower ball joint;

Detaching the upper and lower ball joints from the upper and lower suspension arms;

Installing a Heim joint including an annular shaped socket encasing a freely movable ball shaped member having an included opening therein into the location previously occupied by the ball joint attached to the upper and lower suspension

arm;

Installing an upper and a lower tapered insert into the included opening of the ball shaped member and securing the upper and lower inserts with a bolt that passes through the upper and lower tapered inserts;

Installing the tapered lower insert into the upper and lower included tapered openings of the spindles thereby enhancing the vertical and horizontal travel of the suspension system.

3) An improved vehicle suspension system in which a conventional suspension system having a tie rod in which the distal end of the tie rod is connected to a steering arm and the proximal end is attached to a spindle whereby the improvement comprises removing the distal tie rod end and replacing it with a Heim joint including an annular shaped socket encasing a freely movable ball shaped member having an included opening therein; installing an upper and a lower tapered insert into the included opening of the ball shaped member and securing the upper and lower inserts by fastening means; and attaching the lower tapered insert to the steering arm; removing the proximal tie rod end and replacing it with a Heim joint including an annular shaped socket encasing a freely movable ball shaped member having an included opening therein; installing an upper and a lower tapered insert into the included opening of the ball shaped member and securing the upper and lower inserts by fastening means; and attaching the lower tapered insert to the spindle, thereby enhancing the vertical and horizontal travel of the suspension system.